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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,182	10/12/2001	Ernst F. Reichwein	43299.830001.002	2964

7590 09/08/2005

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EXAMINER

NGUYEN, CUONG H

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/977,182

Applicant(s)

REICHWEIN ET AL.

Examiner

CUONG H. NGUYEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/24/05 (the amendment).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. This Office Action is the answer to the communication received on 10/12/2001.
2. Claims 1-20 are pending in this application.

***Response***

3. The examiner submits a new ground of rejections that answer applicant's argument. The evidences show Shirane et al. (US Pat. 5,491,631) uses sensors to record vehicle's conditions (to answer an argument 6/24/05 on page 8, lines 27-31). Some of the pending claims are obvious with the previous version of the claims; therefore, the examiner respectfully maintains his rejections.

On page 9, para. 1 the applicant argues that Joao is silent about recording, sensing, and/or storing information, and Joao fails to reveal sensors to provide outputs indicative of different operating conditions; the examiner respectfully indicates that Joao discusses about recording malfunction data in Fig. 12A step 204; it is inherently that sensors were used to get malfunction data for a particular operating condition in Joao's disclosure (see Joao, Fig.1 ref. 10, and Fig.2 ref. 10B).

For claim 14, the applicant argues that it is not proper for a combination of Joao, and Koether; the examiner respectfully submits that it is a very familiar on business activities for using digital signatures for authorization a service, a payment .etc.

In summary, the applicant claims fundamental components that provide a vehicle 's malfunction information (see Joao, the abstract, and Fig.1, e.g., an actuator/a switch is responsive to an action by a lay person – Joao suggests of having a vehicle's malfunction data by inherently sensing vehicle's operating conditions; Joao uses a memory for

recording (see Joao, Fig.1 ref. 30); Joao teaches about transferring/downloading recorded data to a service site (see Joao, Fig.1 ref. 60, and Fig. 12B refs. 210-212)).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

**4. Claims 1-13, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joao (US Pat. Publication 2002/0016655 A1), in view of Shirane et al. (US Pat. 5,491,631).**

A. As per claims 1, 5, 11, 15-17, and 20: Joao teach an interactive communication system enabling a driver (a lay person) to communicate operating symptoms of an a vehicle/equipment to skilled service personnel, to enable said service personnel to perform service on said vehicle/equipment in accordance with said operating symptoms (see Joao, Fig.1), comprising:

- sensors associated with said vehicle/equipment (see Joao, Fig.12A refs. 205-206 - this indicates that vehicle's diagnostic sensors are obtained symptoms, a driver obtains those diagnostic information); said sensor array providing a plurality of outputs indicative of a plurality of operating symptoms of said equipment that occur as said driver/lay person operates said vehicle/equipment;
- a memory means associated with said vehicle/equipment (see Joao, Fig.12C ref.213- vehicle data are recorded into a memory);

- a first control means responsive to an action by said driver/lay person (see Joao, Fig. 12A ref. 205 wherein the driver process vehicle problem(s) information):
- actuation of said first control means operating; to cause outputs of said sensors to be stored in said memory means when said driver/lay person actuates said first control means (see Joao, Fig. 12A refs. 205-206);
- a query generator at a service site (see Joao, Fig. 1 ref. 60 – a query is generated from a SERVICE PROVIDER 60 and sending to VEHICLE COMPUTER 30) for generating a symptom-related query:
- a presentation device for receiving said symptom-related query and for presenting said symptom-related query to said driver/lay person (see Joao, Fig. 12B refs. 207, 208, 209);
- a second control means responsive to an action by said driver/lay person in response to said symptom-related query (see Joao, Fig. 12B refs. 211-212 wherein a driver makes decisions about those symptoms); and said second control means being operable to provide a content of said memory means to said service site (see Joao, Fig. 1, ref. 60) for analysis by said service personnel (see Joao, Fig. 12C refs. 213, and 217 – service personnel used available stored current vehicle data);
- o Joao also teaches about generating/presenting a report list after receiving said symptoms (to be used by said service provider/driver - see Joao, para [0288], Fig. 2 refs. 10I, and 10E).

Joao does not expressly disclose about using sensors to get those vehicle data.

However, Shirane et al. clearly use many sensors for recording and outputting vehicle's symptoms "1. Field of the Invention

The present invention is related to a fault diagnostic system for vehicles which is adapted to communicate with an electronic control unit carried on a vehicle such as a car and provided with a self-diagnostic function of detecting and recording faults of various sensors and actuators, and based on the communication result, finds the failures of the electronic control unit and the peripheral equipment connected thereto." (Shirane et al. teach a self-diagnostic means for detecting and recording a fault, see Shirane et al., claim 2).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the idea of Joao, with Shirane et al.'s teaching to expressly include sensors for recording a vehicle's malfunction condition for the advantage of easily retrieve exactly malfunction data and other vehicle's conditions when having those data because these data are useful symptoms for figuring out problems of that vehicle.

**B. As per dependent claims 2, 6, 9, and 18-19:** Joao teaches an interactive communication system of claim 1 wherein said service site (60) and said vehicle/equipment are located at geographically remote sites and wherein the Internet is utilized to send said symptom-related query and said content of said memory means (see Joao, Fig. 1, and claims 9-10, wherein VEHICLE COMPUTER 30 is remotely communicated to a VEHICLE SERVICE PROVIDER COMPUTER 60 via Internet).

Joao suggests a memory to downloading/transmitting the recorded operating conditions/information to a VEHICLE SERVICE PROVIDER COMPUTER (60) (see Joao, the abstract, and claim 1)

**C. As per dependent claims 3, 7, and 10:** Joao teaches an interactive communication system of claim 2 wherein said equipment is an automobile, and service sites are for vehicle services (see Joao, Fig. 1 refs. 30, and 60)

D. As per dependent claims 4, and 8: Joao teaches an interactive communication system of claim 3 wherein said first control means is associated with a portion of said automobile that is utilized as said automobile is operated – a driver actuates vehicle's diagnostic system while said automobile's engine is running (see Joao, Fig. 1).

E. As to claim 12: Joao teaches an inherent fact that a driver senses vehicle's operating conditions of different vehicle components by watching/smelling/hearing/tasting/touching, and reporting sensing symptoms (see Joao, the abstract, and Fig 1).

F. As to claim 13: The rationales and reference for rejection of claim 12 above are incorporated.

Joao does not disclose about instructing a driver how to leave said vehicle with said service provider for repairs; and how and when to claim said equipment following service of said equipment by said service provider.

However, the examiner respectfully submits that instructions for that claimed idea have been already printed in a vehicle drop-off slip (e.g., expected date and time for services plus a common sense of the driver for a symptom) that have been available at service stations.

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the idea of Joao with printed instructions to a driver how to leave said vehicle for repairs; and how and when to pick-up that vehicle to save time and efforts of the driver by knowing in advance proper servicing procedures.

**5. Dependent claim 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joao (US Pat. Publication 2002/0016655 A1), in view of Shirane et al. (US Pat. 5,491,631), and in view of Koether (US Pat. 5,875,430).**

The rationales and reference for rejection of claim 13 above are incorporated.

Joao, and Shirane et al. do not disclose about capturing a signature of a person to provide authorization to a service provider.

However, Koether provides that using a digital signature for authorization a service (see Koether, col.10 lines 45-57).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the idea of Joao with Koether's teaching to include a captured signature because that signature authorizes a repair person to perform a service on that vehicle.

### *Conclusion*

6. Claims 1-20 are not patentable. Applicant's amendment necessitates a new ground of rejections; accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759. The examiner can normally be reached on 7:30 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
CUONG H. NGUYEN  
Primary Examiner  
Art Unit 3661